

REMARKS

The Office Action dated September 20, 2006, has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1-47 are currently pending in the application, of which claims 1, 18-20, 35, and 46-47 are independent. Claims 1 and 18 have been amended to more particularly point out and distinctly claim the invention. No new matter has been added. Claims 1-47 are respectfully submitted for consideration.

Claims 1-42 and 45-47 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,775,534 of Lindgren et al. ("Lindgren") in view of U.S. Patent No. 5,442,805 of Sagers et al. ("Sagers") and further in view of U.S. Patent No. 6,201,973 of Kowaguchi ("Kowaguchi"). The Office Action took the position that Lindgren teaches all of the elements of the claims except "said network access information indicating the areas the user equipment is allowed to access." The Office Action supplied Sagers and Kowaguchi to remedy the deficiencies of Lindgren. Applicants respectfully traverse this rejection.

Claim 1, upon which claims 2-17 depend, is directed to a method including supporting emergency calls in a mobile communications network, said mobile communication network comprising a network element. The method also includes receiving a network access from a user equipment. The method further includes receiving, at the network element, network access information relating to said user

equipment, said network access information indicating the areas the user equipment is allowed to access. The method additionally includes selectively controlling access to the network in dependence on said network access information. The method also includes disabling the selectively controlling access to the network for an emergency call network access.

Claim 18 is directed to a computer program product embodied on a computer readable medium including computer program code, the computer program code configured to perform a method. The method includes receiving a network access from a user equipment. The method also includes receiving, at a network element of a network, network access information relating to said user equipment, said network access information indicating the areas the user equipment is allowed to access. The method further includes selectively controlling access to the network in dependence on said network access information. The method additionally includes disabling the selectively controlling access to the network for an emergency call network access.

Claim 19 is directed to a computer program product comprising a computer useable medium having computer readable code embodied therein for supporting emergency calls in a mobile communications network. The computer program product is configured when executed on a computer to perform receiving a network access from a user equipment, said network access information indicating the areas the user equipment is allowed to access. The computer program product is also configured when executed on a computer to perform receiving network access information relating to said user

equipment. The computer program product is further configured when executed on a computer to perform selectively controlling access to the network according to said network access information. The computer program product is additionally configured when executed on a computer to perform disabling the selectively controlling access to the network for an emergency call network access.

Claim 20, upon which claims 21-34 depend, is directed to a network element including a network access request receiving unit configured to receive a network access request from a user equipment in a network. The network element also includes a network access information receiving unit configured to receive network access information relating to said user equipment, said network access information indicating the areas the user equipment is allowed to access. The network element further includes a selection unit configured to selectively control network access for the user equipment in dependence on said network access information. The network element additionally includes a disabling unit configured to disable the selection unit for an emergency call network access.

Claim 35, upon which claims 36-45 depend, is directed to a communication system including an access network. The communication system also includes a core network. The communication system further includes at least one user equipment configured to connect to the core network through the access network. The access network is configured to receive a request for a network access from the user equipment. The access network is also configured to receive network access information relating to

the user from the core network, said network access information indicating the areas the user equipment is allowed to access. The access network is further configured to selectively control access to the core network for the user equipment in dependence on said network access information. The access network is additionally configured to identify a request for an emergency call. The access network is also configured to disable the selective controlling of access to the network responsive to identification of the emergency call.

Claim 46 is directed to a network element including network access request receiving means for receiving a network access request from a user equipment in a network. The network element also includes network access information receiving means for receiving network access information relating to said user equipment, said network access information indicating the areas the user equipment is allowed to access. The network element further includes selection means for selectively controlling network access for the user equipment in dependence on said network access information. The network element additionally includes disabling means for disabling the selection means for an emergency call network access.

Claim 47 is directed to a communication system including an access network, a core network, and at least one user equipment for connection to the core network through the access network. The access network includes means for receiving a request for a network access from the user equipment. The access network also includes means for receiving network access information relating to the user from the core network, said

network access information indicating the areas the user equipment is allowed to access. The access network further includes means for selectively controlling access to the core network for the user equipment in dependence on said network access information. The access network additionally includes means for identifying a request for an emergency call. The access network also includes means for disabling the means for selectively controlling access to the network responsive to identification of the emergency call.

Telecommunications networks can store “network access information” associated with a user. This information can define the areas that a user equipment is allowed to access. Certain embodiments of the present invention offer an improved system of supporting emergency calls in a telecommunications network. When the user equipment attempts to establish a connection for an emergency call, the “network access information” can be received by the controlling network element. The controlling element can then disable the process of checking this information and allow the emergency call.

Such embodiments can provide an advantageous improvement over previous system in which, when a user equipment attempts to connect to a network to make an emergency call, the network will simply allow the connection.

Consequently a connection can be permitted in certain embodiments of the present invention even if the “network access information” defines that the user equipment is to be denied access. During an emergency call established in these circumstances, if the network then receives the “network access information” (for example if the user

equipment changes the base station it is connected to or if the user equipment enters into a new connection – *e.g.* to send or receive data services), the user equipment may be denied access to the network.

Applicants respectfully submit that the combination of Lindgren, Sagers, and Kowaguchi fails to disclose or suggest all of the elements of any of the presently pending claims, and, therefore, the cited combination cannot provide the above-identified critical and unobvious advantages.

Lindgren generally relates to a telecommunications system that allows emergency calls in a voice over IP (VoIP) radio telecommunication system. Under Lindgren, an emergency call indication is provided in a session activation request. This emergency call indication overrides any refusal of service “even if it would normally fail.” There is no hint or suggestion in Lindgren that the network or an element thereof receives “network access information relating to said user equipment, said network access information indicating the areas the user equipment is allowed to access.” Furthermore, there is no use in Lindgren for such information.

The Office Action, at page 3, acknowledged this deficiency of Lindgren, and cited Sagers and Kowaguchi to teach this missing feature.

Sagers generally relates to location-based adaptive radio control. More particularly, Sagers discusses a method of adjusting the operating parameters of a mobile radio in relation to its current location. At column 2, lines 49-51, Sagers describes a

mobile radio including a "location determining device or system, such as a LORAN, satellite global positioning systems, or dead reckoning."

In a first embodiment of Sagers, "the location determining device is capable of determining whether the radio is located in location A or location B." In response the radio will change its operating band. In a second embodiment of Sagers, a communication system is capable of transmitting a command to a radio station defining a area in which transmission is automatically inhibited. The radio determines if it has entered the restricted area and acts accordingly.

In both embodiments of Sagers, the location of the mobile station is determined by the mobile station itself. Furthermore information is provided in or to the mobile station, and that information defines geographic areas in which certain functions of the mobile station are to be controlled. In both embodiments of Sagers, the mobile station itself determines whether its present location is within a prescribed area.

Kowaguchi generally relate to a similar system in which a mobile communication apparatus having a transceiver is provided with a "location calculator." The mobile communication apparatus has a plurality of transmission inhibition areas stored in a memory. The transceiver is controlled depending on whether the location of the mobile communication apparatus is within one of the transmission inhibition areas. The transmission inhibition areas are stored in the transmission inhibition area table in the mobile communications apparatus (reference 216 of Figure 3).

It is apparent that the operation of Kowaguchi is similar to that of Sagers inasmuch as the mobile station determines its position and whether or not it is within a prescribed area.

The combination of Lindgren with either or both of Kowaguchi and Sagers cannot, therefore, teach, disclose, or suggest the present invention as recited in the claims.

For example, there is no hint or suggestion that the information defining the prescribed areas (Kowaguchi and Sagers), stored in the mobile station, should be sent to the network.

Furthermore, both Kowaguchi and Sagers teach away from such a transmission action. Since the location is determined and processed within the mobile station, there would be no obvious reason that the information describing the prescribed areas should be sent to the network. Moreover, since both documents teach inhibiting transmission in certain prescribed areas, it would be illogical to transmit information from the mobile station in order to prohibit transmission of information from the mobile station.

Furthermore, even an abstract, hindsight-motivated combination of features of the two documents cannot teach the present invention as claimed. Both Kowaguchi and Sagers teach prohibiting transmission (as well as controlling other features such as frequency). Prohibiting transmission is entirely separate from controlling access to a network. Should a user equipment be denied access to a network, it will normally continue to transmit, potentially using higher power, to find a network to which it is allowed access.

Applicants, therefore, respectfully submit that information determining whether a user equipment is allowed to transmit is an entirely separate and different feature from “areas the user equipment is allowed to access,” and that the latter is not taught or suggested by the former.

The independent claims of the present invention (claims 1, 18-20, 35, and 46-47), which each have their own scope, each specify that the network access information, indicating the areas the user equipment is allowed to access, is received in a network element or in an access network. For example, claim 1 recites: “receiving, at the network element, network access information relating to said user equipment, said network access information indicating the areas the user equipment is allowed to access.”

As explained above, even if Sagers and Kowaguchi were to disclose such information, they do not disclose or suggest that the information is received at a network element or access network. Furthermore, as explained above, what Sagers and Kowaguchi disclose is not network access information that indicates the areas the user equipment is allowed to access, but rather prohibited transmission areas, which is not equivalent to areas the user equipment is allowed to access.

To put it another way, Sagers is interested in locations from which the mobile station is not allowed to transmit, as opposed to areas (of, for example, a network) that the mobile station is allowed to access.

The Office Action cited column 3, line 56, to column 4, line 34, of Sagers as disclosing this feature. However, as can be seen from Figure 3, the cited portion is not

concerned with network access at all, but rather with prohibiting the transmission of radio frequency in a hazard area. Specifically, the cited portion is concerned with assisting a mobile station in avoiding causing an explosion in the presence of unstable explosives. In contrast, the claims recite “network access information.”

Accordingly, Applicants respectfully disagree with the Office Action’s characterization of Sagers as disclosing “areas the user equipment is allowed to access.” Thus, it is respectfully submitted that the combination of Lindgren, Sagers, and Kowaguchi fails to disclose or suggest all of the elements of any of independent claims 1, 18-20, 35, and 46-47, and it is respectfully requested that the respective rejections of claims 1, 18-20, 35, and 46-47 be withdrawn.

Claims 2-17, 21-34, 36-42, and 45 depend respectively from, and further limit, claims 1, 20, and 35. It is, therefore, respectfully submitted that each of claims 2-17, 21-34, 36-42, and 45 recites subject matter that is neither disclosed nor suggested in the combination of Lindgren, Sagers, and Kowaguchi. Thus, it is respectfully requested that the rejection of claims 2-17, 21-34, 36-42, and 45 be withdrawn

Claims 43-44 were rejected under 35 U.S.C. 103(a) as being unpatentable over Lindgren in view of Sagers and Kowaguchi and further in view of U.S. Patent No. 6,594,492 of Choi et al. (“Choi”). The Office Action took the position that Lindgren, Sagers, and Kowaguchi disclose most of the features of claims 42-43, but cited Choi to remedy certain deficiencies of Lindgren, Sagers, and Kowaguchi with regard to those claims. Applicants respectfully traverse this rejection.

Claims 42-43 depend from and further limit claim 35. At least some of the deficiencies of Lindgren, Sagers, and Kowaguchi with regard to claim 35 are discussed above. Choi fails to remedy the deficiencies of Lindgren, Sagers, and Kowaguchi, and, thus, the combination of Lindgren, Sagers, Kowaguchi, and Choi fails to disclose or suggest all of the elements of any of the presently pending claims.

Choi generally relates to anchor MSC information retrieval from a serving MSC following a completed inter-exchange handoff. Thus, Choi is concerned with inter-exchange handoffs with regards to mobile stations. At column 6, lines 42-54, Choi discusses obtaining the current position of the mobile station during an inter-exchange handoff. This is in relation to an emergency call. However, there is no further reference in Choi of allowing or disallowing this emergency call. Therefore, Choi has little (if any) bearing on the present invention, and in particular cannot disclose or suggest the features of the present invention which are not taught by the combination of Lindgren, Sagers, and Kowaguchi. It is, therefore, respectfully requested that the rejection of claims 42-43 be withdrawn.

For the reason explained above, it is respectfully submitted that each of claims 1-47 recites subject matter that is neither disclosed nor suggested in the prior art. It is, therefore, respectfully requested that all of claims 1-47 be allowed, and that this application be passed to issue.

If, for any reason, the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by

telephone, Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,


Peter Flanagan
Registration No. 58,178

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Tysons Corner, Virginia 22182-2700
Telephone: 703-720-7800
Fax: 703-720-7802

PCF:kzw

Enclosures: Petition for Extension of Time